September 30, 2014

Municipal Permit Comments
Washington State Department of Ecology
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Via email to: SWPermitComments@ecy.wa.gov

The following comments represent the opinion of the US Composting Council (USCC) related to the Washington Department of Ecology 'Modifications of the Municipal Stormwater Phase I and Western Washington Phase II permits, as well as the Stormwater Management Manual for Western Washington (SWMMWW).' Our comments relate generally to the restrictions of compost to be used in stormwater applications based on feedstocks used to make the compost, as well as specific comments on the references used in the specification T7.30.

The USCC has long realized the benefits associated with compost use for soil-water systems. Research has demonstrated that compost use on construction sites results in significant improvements in water quality in run off from those sites. Similar results have been observed for compost use on highway right of ways. This factor is likely responsible for the WA State Departments of Transportation (DOT) being the largest compost user within the State. Benefits of compost use have also been recognized in Washington in the Soils for Salmon program (http://www.soilsforsalmon.org/). This nationally recognized program requires the use of compost for soil and water improvement. Additionally, DOTs across the nation (CA, OR, TX, NC, SC and others) are using hundreds of thousands of cubic yards of compost annually for erosion control and soil amending applications.

With this history, it is clear that we also strongly support the use of compost for green stormwater infrastructure, including rain gardens and bioretention systems. The USCC commends the Washington Department of Ecology for proactively adopting standards for the use of compost in these systems. However, we strongly disagree with the WA DOE basing these compost standards on the feedstocks used to produce the compost.

We urge the DOE to adopt performance specific standards based on the analysis of the finished compost as an alternative. For example, since the amount of phosphorous (P) migrating into water systems is a concern, it would be more scientific and accurate to limit the water-soluble P content of compost. Inclusion of certain feedstocks doesn't always lead to increased P content or release of P in water, and so categorically excluding these organics won't necessarily achieve the goal. It is possible to create a compost with some biosolids or manure that doesn't release very much P. Most vegetation in these applications require low levels of P. While there may be little disagreement that excessive, water soluble phosphorus (P) can be detrimental to surface and ground water quality, soil erosion resulting from a lack of

established vegetation can be even more detrimental. Permanent vegetative establishment is the ONLY long term solution to erosion control.

The continued use of low-P lawn fertilizers remains a prudent and practical strategy of protecting the water quality by helping plants become established and to thrive.
The Association of American of Plant Food Control Officials (http://www.aapfco.org/), the organization representing state department of agriculture officials from across the US, is in the process of formalizing a position paper that makes this statement related to the phosphorus issue. Phosphorus is absolutely essential to establishing and maintaining healthy plant growth.

One of the most important programs that we support is the US Composting Council's Seal of Testing Assurance (STA) testing program for finished compost products. This program was created in 2000 to create a standardized testing and labeling program for all compost, regardless of feedstock. The standardized series of tests includes measures of the physical, chemical and biological characteristics of compost. Agencies, companies and individuals that purchase STA compost are assured a certain level of quality for their products. This program has set a standard for compost testing, and a standard that has enabled broader use and acceptance of compost. All of the DOTs identified in paragraph one (including WSDOT) require STA compost ONLY, for all of their compost purchases. The history of STA testing has also clearly shown that the finished compost characteristics are a much better indicator of compost quality than the feedstocks used to produce the compost.

Low impact stormwater infrastructure projects will be held to a high level of performance standards. Using green infrastructure in combination with grey or engineered infrastructure is a terrific way to enhance natural processes. However, there is a range of performance and regulatory uncertainties associated with these as yet generally untested systems. By choosing to regulate feedstocks rather than final product quality, the USCC is concerned that the WA DOE will set this process back rather than moving it forward. We would encourage you to work to develop performance-based measures, along the line of our very successful STA program, to assure that green stormwater systems built with compost will meet all environmental and regulatory expectations.

Wayne Thompson, the original editor of the TMECC, has reviewed the specs for "Bioretention" which is BMP T7.30. References to TMECC can be found on pages 7-17 – 7-19 (physical pages 175-177). Several errors in the references to the TMECC manual were found. These are noted below:

1) TMECC is the acronym for "Test Method for the Examination of Composting and Compost" (error on 7-17 - page 175).
2) This section also contains an unrealistic value for a minimum organic matter content of 40%. 30% would be a maximum practical value, unless the 40% includes wood fragments as part of the organic matter (wood chip fragments are technically not organic matter, but undecomposed organic material). Note that LOI (loss on ignition) organic matter is supposed to be determined on the <9.6 mm fraction of a compost.
3) Soluble Salts Content should read "Electrical Conductivity Value". Also note that mmhos/cm is OK, but the generally accepted unit of measure is dS/m.
4) Both Maturity and Vigor are to be reported for 05.05-A SEEDLING EMERGENCE AND RELATIVE GROWTH (name of method not correctly referenced).

5) C:N Ratio should reference "Method 05.02-A Carbon to Nitrogen Ratio" (note too that Total N is used in this calculation - not just the organic fraction ... Kjeldahl-N)

The US Composting Council (USCC), a 501(c)6 Trade and Professional Association, is the only national organization in the United States dedicated to the development, expansion and promotion of the composting industry. The USCC has over 800 member companies, including private and municipal compost producers, equipment manufacturers, product suppliers, academic institutions, public agencies, nonprofit groups and consulting/engineering firms.

We appreciate the opportunity to comment on these proposed regulations. It is our hope that the Washington State Department of Ecology accepts these comments as factual and science-based, and revises the draft regulations to include all compost feedstocks.

Regards,

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